The Application of Power to Farm Work.

We find this interesting article in Farm and Ranch credited to Export Implement Age:

In a republic the quality of a man is of as much importance as what he earns, and while we cannot measure by percentage what machinery has done for the intellectual development of the farmer we know that swinging a hoe does not stimulate thought like operating the lever of a steam thrasher.

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The American farmer is not only the largest user of farm machinery in the world; he is also the most wasteful. The average life in America of a self-binder is less than half what it is in Germany. The American farmer uses power machines because he cannot afford hand labor. It is too scarce and costly, and he is now facing certain tendencies which make his success more dependent on the economies of power than ever before. * * * The building of suburban steam and trolley lines, the extension of telephones into farming districts, and free rural delivery, are bringing the city and country into a constantly closer union. Farm and city laborers meet and compare notes, and the farmer's son or the farm worker no longer hesitates to try his fortune in the factory if wages or conditions of labor seem more attractive. With the increasing wages and shortened hours of labor in the factory he is insisting more and more that farm work shall have the same privileges. In any event the influence of organized labor and the rising wages of the cities is felt today in every agricultural community. Men no longer work from sun-up to sundown, and where labor is scarce as in California, the hours are as rigorously restricted as in any city factory. If American agriculture is to maintain itself in the markets of the world, it must do this through a continued improvement in machinery which will make the individual man more and more efficient.

It is not possible to say how this will be done with respect to any particular machine, for the work of the inventor is always an advance into the unknown, but we may with profit consider some of the general influences which should be utilized to secure improvement in design and more efficient use of machinery. The first thing is better training for the American farm in mechanical principles. American farm machinery is not rendering the service it should, because it is not selected with wisdom and not operated and cared for with skill. We buy a plow which needs a team of 1,700-pound horses to pull it, and then hitch it behind a team of 200-pound horses. The result is neither plow nor team is a success. We leave our wagons, our mowers and self-binders exposed to rain and sun, thus lessening both their life and their service, and we do this without shame or reproach. We need in this country a public sentiment which will put the farmer who neglects or misuses machinery on the same plane with the farmer who has poor breeds of stock or who neglects to care for them. We need investigation which will enable farmers and manufacturers to adapt machinery more perfectly to the power that is to run it and the strength that is to control it. How much does the average farmer today know or think about the power required to pull any machine or the importance of having the size of machines adjusted to the size or number of horses which he keeps? And how much energy in this country is wasted by teams who walk too far for the work they do, or who are worn out by being harnessed to a load too heavy for them to pull? Investigations carried on last year by the Iowa State College to determine the relation between the weight of horses and the draft of breaking plows show how valuable to both the farmer and the maker of machinery a better understanding of these matters would give. When we have studied the relation of the power needed to operate machinery to the size and weight of the horses which supply this power, as we have studied the chemistry of feeding animals or the relation of fertilizers to the needs of soils, the factory will make better tools and the farmer will make more money out of their use. * * * We are in the beginning of another evolution whose possibilities we are unable to forecast. This is the employment of steam, wind, gas and electricity as sources of power in farm work. How far these are to take the place of both men and animals we cannot predict, but every year sees their uses widening. Wind, which was at first used almost solely for pumping water for livestock, is being used to cut feed, saw wood, run the machinery of dairies, and it seems possible that with improvements in electrical storage it may in time light the farmer's house, furnish the heat to cook his dinner and iron his clothes. The potential power of the streams which rise in our mountain summits and flow down to the sea is enormous. Much of this is utilized because heretofore the factory had to go to the stream, and this was not possible, but with the improvements in electrical transmission the stream now goes to the farm and the factory. Steam and gas engines plow and pulverize the soil, plant the seed, pump water for the irrigation of the crop, run the cultivator, the thrasher and the harvester. Some farms not have more power and more complicated machinery than many extensive factories. On one ranch in California the farm machinery operated by gas or steam cost over $60,000, and the farm equipment of this character is being constantly increased. This kind of power seems to be displacing the horse, just as the locomotive has supplanted the stage coach. The automobile can go faster

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and longer than the trotter. The steam plow in some places does better work than the horse and does it cheaper. This year a gasoline engine attached to a harvester on the water-logged lands of the Northwest was able to run in fields where horses mired. Throughout the southern part of the United States there is a great field for the steam and gas moter. They can operate in the summer's heat amid mosquitoes and flies without discomfort and loss of efficiency which attends the use of the horse and mule.

To me the most interesting feature of the Lewis and Clark Exposition, and one which was most significant, of our advanced civilization in this country, was the splendid display of farm machinery in the agricultural building. No one could look at this without having pride in the men who require and use such tools. I filled page after page of my notebook with a list of these evidences of American inventive skill. It includes dairy machinery which makes better butter than can be made by hand; a 30 horse-power steam plow which will turn over the soil of a good-sized farm in a single day; a 40 horse-power traction engine which hauls its load over the country roads at five miles an hour, and requires as much mechanical skill to run it as a locomotive.

A Banner Orange Crop.

It is now evident that Wauchula will this season ship the largest amount of oranges of any season in its history. More than forty-three thousand boxes have already been shipped and authorities now say that the season's crop will run over one hundred thousand boxes. All of this fruit is produced in this vicinity and hauled to the packing-houses in wagons, there being no fruit shipped here in a bulk to be packed as there is at some stations.

There is not only a large crop of fruit, but it is of excellent quality, is carrying fine and giving the best of satisfaction in the markets.—Wauchula Advocate.

Goats for Dairying.

It seems likely that in the not distant future we will have to welcome the goat to the number of our dairy animals. The goat has long been an important factor in the dairying in foreign countries, but has never attained such distinction in this country. About the only place in which the goat has ever received any distinction of this kind in the United States is in some of the poorer portions of our large cities, where the nanny goat may be seen here and there trying to pick a living from the piles of rubbish and tomato cans on the vacant lots. We understand that the United States Department of Agriculture is about to send an agent to Europe to study the milk goats there and the methods of caring for them and handling their milk. As all know, some of the most famed of the foreign cheese is made from the milk of the goat. The milk and cheese-making industry in some of the European countries hangs largely on the milk-giving powers of the goat. —Coleman's Rural World.

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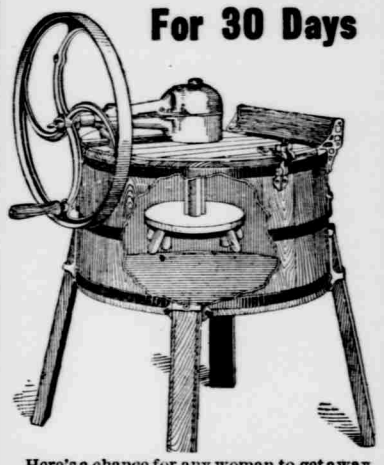

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